1885MNRAS..46...22P

The Outburst in Andromeda. By Rev. S. J. Perry.

The *Nova* in *Andromeda* has been observed at Stonyhurst on every favourable occasion from September 13 to November 8. On September 13 the spectrum was found to be continuous, but the red end was absent, and there was a decided maximum in the green. A bright band in the green was suspected but not clearly seen. The spectroscope was carefully focussed on the lines in the spectrum of β *Andromedæ*, which were well seen, before being turned on the nebula of *Andromedæ*. On October 9 the spectrum was still brightest in the green.

The brilliancy of the *Nova* decreased at first very rapidly, but at present, although it is still very decidedly stellar, as is made evident by increase of power, there is no great change from day to day, the magnitude remaining at about the eleventh. With a low power the nucleus alone is visible, but with powers of from 200 to 300 the *Nova* still stands out very prominently, and is undoubtedly more brilliant than the nucleus.

Stonyhurst Observatory:
1885, *November* 11.

Note on Mr. Chambers's suspected New Variable in Corona Borealis. By Rev. T. E. Espin.

The star observed by Mr. Chambers is the variable star No. 109 of Gore's catalogue of known variable stars. It is there termed *V Coronæ*. The variation was discovered in 1878 by Dunér.

The star was observed by me on the night of June 9, 1885, with 9-inch Equatorial Reflector, during the reobservation of Birmingham's red stars, and I was as much surprised as Mr. Chambers at finding so finely coloured a star where Birmingham and Ball had previously found none. I extract from my notebook the observation of it.

"This star must be variable; Ball and Birmingham (4 obs.) did not see it. It was at once seen to-night, and identified as DM+40°·2929. Colour fine red. There is a star 8·0 DM+40 2928 6′·3 N. of it. The neighbouring star S, DM+39°·2920 is evidently underrated by Argelander, who gives it 9·4. It is now nearly equal to DM+39·2923, whose magnitude, according to Argelander, is 8·9. The red star is about 9·0 mag."

Dunér's discovery of its variation was announced in the *Astr. Nach.* No. 2227.

High Street, Wolsingham, Darlington:
1885, *November* 7.

Downloaded from http://mnras.oxfordjournals.org/ at university of winnipeg on August 29, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1885MNRAS..46...22P

Notes on the Total Solar Eclipse of September 9, 1885, viewed at the Terrace, Wellington, New Zealand. By Charles Rous Marten, F.R.G.S., F.R.Met.Soc.

(*Communicated by Prof. Adams.*)

The following are simply what they profess to be—"Notes"—and do not claim to be in any sense complete or exhaustive observations. Such elaborate and extensive preparations had been made for the observation of the eclipse by the regular official authorities, that I assumed that these would furnish all the results ordinarily desired, and accordingly I devoted my own attention rather to certain details respecting which I felt personally interested. Finding, however, that the official observations were in a large degree marred by unfavourable weather, I send, for what they may be worth, such general notes as I made, having been fortunate in enjoying a perfect view of the phenomenon. The particular details to which, as mentioned above, I addressed my especial attention, I have not time now to deal with, but I may do so at a future date.

The day of the eclipse was ushered in by most unpromising conditions of weather—a strong southerly gale blew from seaward, bringing dense masses of cloud and a very low temperature.

Westward the sky was fairly clear, but eastward the cloud canopy was very heavy. The Sun was not once visible until 7.4 A.M., but from that time forward it was never seriously obstructed by clouds. My position was in my front garden, at an elevation of about 100 feet above the level of the bay; my apparatus was of the simplest kind. An exceptionally good binocular field-glass, darkened glasses for use before and after totality, an excellent chronograph, self-registering thermometers by Casella.

At 7.4 A.M. the solar disc, then partially eclipsed, showed itself through a rift in the clouds. The clouds then cleared off, excepting on the horizon, and an absolutely perfect view was obtained thenceforward to the conclusion. No noteworthy diminution of light could be discerned by the mere vision until fully two-thirds of the solar disc had become covered, but from the time the first decrease in illumination was noticeable, the light faded very swiftly. The sunlight in New Zealand is usually exceedingly brilliant, far more so than in England, and quite as vivid as in most tropical countries. I observed the difference on the one hand, and the similarity on the other, in my recent visits to England and Brazil.

As totality approached, the effects of light and shade on terrestrial objects were very weird and striking. I may add that they differed materially in intensity from those I have observed in two former eclipses. There was a curious mixture of purple and green and bronze in the hues pervading the hills, while the blue sky deepened into iron grey and then to a leaden

Downloaded from http://mnras.oxfordjournals.org/ at university of winnipeg on August 29, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System